

**CLAIMS LISTING**

1. (Canceled).

2. (Currently amended) A method for determining power of a modulated signal, comprising:

applying the modulated signal to a wavelength meter to provide a frequency transformed interferogram representing the modulated signal by a plurality of consecutive frequency bins, each frequency bin in the plurality of frequency bins having a corresponding bin value;

designating a bin range within the frequency transformed interferogram, The method of claim 1 wherein designating the bin range within the frequency transformed interferogram includes mapping a series of signal characteristics to a corresponding series of bin spans and enabling a selection of one signal characteristic from the series of signal characteristics, wherein in response to selection of the one signal characteristic from the series of signal characteristics establishing the designated bin range as having a bin span that corresponds to the selected one signal characteristic defined by the mapping of the series of signal characteristics to the corresponding series of bin spans, and being centered about a center bin within the frequency transformed interferogram; and

summing a series of bin values within the frequency transformed interferogram over the designated bin range to provide a sum that represents the power of the modulated signal to a predetermined accuracy.

3. (Original) The method of claim 2 wherein the series of signal characteristics indicates at least one of a plurality of modulation formats for the modulated signal, a plurality

of channel spacings for optical carriers of the modulated signal, and a plurality of frequency spans that encompass modulation of the modulated signal.

4. (Original) The method of claim 2 wherein the mapping of the series of signal characteristics to the corresponding series of bin spans is established empirically.

5. (Original) The method of claim 3 wherein the mapping of the series of signal characteristics to the corresponding series of bin spans is established empirically.

6. (Original) The method of claim 2 wherein the mapping is established according to a computer simulation of the wavelength meter providing the frequency transformed interferogram.

7. (Original) The method of claim 3 wherein the mapping is established according to a computer simulation of the wavelength meter providing the frequency transformed interferogram.

8. (Original) The method of claim 2 wherein enabling a selection of the one signal characteristic from the series of signal characteristics includes presenting a display menu representing the series of signal characteristics and providing for the selection of the one signal characteristic from the display menu via a pointing device.

9. (Original) The method of claim 3 wherein enabling a selection of the one signal characteristic from the series of signal characteristics includes presenting a display menu

representing the series of signal characteristics and providing for the selection of the one signal characteristic from the display menu via a pointing device.

10. (Original) The method of claim 2 wherein enabling the selection of one signal characteristic from the series of signal characteristics is performed automatically based on attributes of the frequency transformed interferogram representing the modulated signal.

11. (Original) The method of claim 3 wherein the selection of the one signal characteristic from the series of signal characteristics is performed automatically based on attributes of the frequency transformed interferogram representing the modulated signal.

12. (Original) The method of claim 10 wherein performing the selection of the one signal characteristic from the series of signal characteristics automatically includes assessing bin values corresponding to multiple frequency bins within the frequency transformed interferogram to determine at least one of a modulation format of the modulated signal applied to the wavelength meter and a frequency spacing of optical carriers of the modulated signal applied to the wavelength meter.

13. (Canceled).

14. (Currently amended) A method for determining power of a modulated signal, comprising:

applying the modulated signal to a wavelength meter to provide a frequency transformed interferogram representing the modulated signal by a plurality of consecutive frequency bins, each frequency bin in the plurality of frequency bins having a corresponding bin value;

designating a bin range within the frequency transformed interferogram, The method of claim 13 wherein designating the bin range includes accessing bin values corresponding to multiple frequency bins within the frequency transformed interferogram and based on the accessed bin values establishing the bin range to be centered about a center bin within the frequency transformed interferogram and to have a bin span within the frequency transformed interferogram that includes a predesignated number of sidebands on each side of the center bin, the predesignated number of sidebands representing modulation of the modulated signal; and  
summing a series of bin values within the frequency transformed interferogram over the designated bin range to provide a sum that represents the power of the modulated signal to a predetermined accuracy.

15. (Currently amended) A method for determining power of a modulated signal, comprising:

applying the modulated signal to a wavelength meter to provide a frequency transformed interferogram representing the modulated signal by a plurality of consecutive frequency bins, each frequency bin in the plurality of frequency bins having a corresponding bin value;

designating a bin range within the frequency transformed interferogram, The method of claim 13 wherein designating the bin range includes accessing bin values corresponding to multiple frequency bins within the frequency transformed interferogram and based on the accessed bin values, establishing the bin range to be centered about a center bin within the frequency transformed interferogram and to have a bin span within the frequency transformed interferogram that spans a sufficient number of frequency bins on each side of the center bin so that any bin span wider than the bin span has bin values that do not exceed a designated threshold of the frequency transformed interferogram; and

summing a series of bin values within the frequency transformed interferogram over the designated bin range to provide a sum that represents the power of the modulated signal to a predetermined accuracy.